

BURLINGTON RESOURCES OIL AND GAS CO.

IBLA 97-55

Decided November 20, 1998

Appeal from a decision of the New Mexico State Office, Bureau of Land Management, affirming a decision by the Farmington Resource Area ordering Burlington Resources Oil and Gas Company to drill two diligence wells on Jicarilla Tribal Oil and Gas Lease Contract No. 117. SDR 97-02.

Affirmed.

1. Indians: Mineral Resources: Oil and Gas: Tribal Lands--Oil and Gas Leases: Generally

Under 43 C.F.R. §§ 3161.2 and 3162.2(c), the Bureau of Land Management may require the operating rights owner to promptly drill and produce a well when it determines such a well is reasonably required in order that the lease may be properly and timely developed and produced in accordance with good economic practices.

2. Indians: Mineral Resources: Oil and Gas: Tribal Lands--Oil and Gas Leases: Generally

Under the prudent operator rule, a lessee is held to act in a manner which would be reasonably expected of operators of ordinary prudence, having regard to the interests of both lessor and lessee. Important factors in determining whether the lessee has diligently developed the lease is the price of gas at any time it is claimed additional wells should have been drilled and the geologic information available on which to base a reasoned decision as to whether drilling at any particular location will result in a well producing in paying quantities.

3. Administrative Procedure: Administrative Record--  
 Administrative Procedure: Administrative Review--  
 Appeals: Generally--Rules of Practice: Appeals:  
 Generally

An administrative decision is properly affirmed if the case record indicates the lessee operator could drill diligence wells on the lease and receive a rate of return consistent with the criteria for economic operations set forth in IM 89-12 Change 2.

APPEARANCES: Marla J. Williams, Esq., Edward E. Abels, Jr., Esq., Denver, Colorado, for Appellant; Grant L. Vaughn, Esq., Office of the Solicitor, U.S. Department of the Interior, Santa Fe, New Mexico, for the Bureau of Land Management.

#### OPINION BY ADMINISTRATIVE JUDGE TERRY

Burlington Resources Oil and Gas Company (Burlington or Appellant) <sup>1/</sup> has appealed the November 1, 1996, Decision (Decision) of the Deputy State Director, Resource Planning, Use and Protection, New Mexico State Office, Bureau of Land Management (BLM), upholding the September 9, 1996, Order (Order) of BLM's Farmington District Office (FDO) requiring that Burlington commence preparations to drill two diligence wells, one into the Pictured Cliffs formation and the other into the Gallup/Dakota formation on Jicarilla Tribal Oil and Gas Lease Contract No. 117 (Contract 117), no later than December 4, 1996. The Board granted a stay of this Order on December 3, 1996. Appellant seeks rescission of the BLM Order.

On April 28, 1995, Appellant was notified by letter from FDO, BLM, regarding the need for additional development of Contract 117 in secs. 27, 28, 33, and 34, T. 26 N., R. 3 W., New Mexico Principal Meridian, Rio Arriba County, New Mexico. The lands within Contract 117 overlie the Pictured Cliffs, Mesa Verde, Fruitland Coal and Gallup/Dakota geologic formations. On June 30, 1995, Appellant responded to BLM that it intended to drill a commingled Pictured Cliffs/Mesaverde well and that funding for this effort would be included in its 1996 budget. On January 9, 1996, Burlington filed an Application for Permit to Drill the Jicarilla 117E No. 7A well to be completed within the Pictured Cliffs formation in compliance with the diligence review. Subsequently, on February 28, 1996, Appellant notified FDO that the economics of drilling well No. 7A had changed and that the proposed well was now uneconomic based on 1996 pricing assumptions.

On March 22, 1996, Appellant's representatives met with personnel of the FDO to discuss the economics of the further development of Contract 117. On March 27, 1996, the FDO advised Appellant by letter that

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<sup>1/</sup> Formerly Meridian Oil Company.

BLM concluded it would still be economical to develop both formations on the lease. In a letter dated April 2, 1996, accompanied by maps, tables and an explanation of its economic position, Burlington again requested that BLM grant a deferral of development of the Pictured Cliffs formation in the SE¼ of sec. 28. The case file reflects that Appellant was advised by FDO telephonically on April 22, 1996, that a review of the April 2, 1996, data provided by Appellant showed that the proposed well would be economic under BLM diligence criteria. In a letter dated April 24, 1996, from Burlington to Snyder Oil, the reputed assignee of drilling rights in the E½ sec. 34, Appellant asked, without apparent effect, the assignee to respond directly to FDO concerning development of the Gallup/Dakota in the E½ sec. 34. The September 9, 1996, Order to Appellant to commence development in the Pictured Cliffs and the Gallup/Dakota formations by December 4, 1996, followed.

In its Letter requesting State Director's Review (Letter) dated October 7, 1996, Appellant asked the State Director to rescind the September 9 Order, because "the FDO has not demonstrated that a development well is required." (Letter at 3.) Appellant argued that it is only required to drill an additional development well if a prudent operator would do so and Appellant claimed that its unrefuted geologic and economic analysis shows that drilling a development well would not be a prudent investment at this time. Id. Appellant's other arguments urging rescission of the Order were as follows:

The FDO Order should be rescinded because it threatens Burlington with a remedy for non-compliance that is impermissible, would violate the Lease terms and is too vague to permit informed analysis by Burlington.

The FDO Order should be rescinded because it fails to to give notice to Snyder Oil as operator of that part of the lease covering the E1/2 of Section 34 from the surface to the base of the Dakota.

The FDO Order should be suspended pending final resolution because failure to do so would result in irreparable harm to Burlington--the threatened forfeiture of portions of the Lease if Burlington does not commence a well before December 4th. Either outcome would render Burlington's appeal rights meaningless. Moreover, this is not a drainage situation or other situation where reserves are being lost to adjacent operations.

Id.

In its Response (Response) to Appellant's Letter before the State Director, FDO urged that the operator's failure to continue development of the lease while oil and gas can be secured in paying quantities is a clear violation of Paragraph 3(f) of the Lease Agreement. (Response at 2.) The District Office stated that, while Appellant claims that Contract 117

is well-developed with well completions in 21 separate zones, 62 completions would be required to fully develop all the productive formations in the Contract (excluding geologic and economic considerations). Thus, FDO claims that only about one-third of the Contract has been developed. Id. The District Office also disputes Appellant's claim that BLM failed to present any data at the March 22, 1996, meeting, claiming that BLM presented five separate economic analyses for consideration. Id.

In its Response, FDO made clear that the real dispute lies in the difference in the rate of return considered economical by BLM and that which is acceptable to Appellant, in light of the risks involved in drilling. The Farmington office urged that a rate of return which meets or exceeds the discount factor (approximately 10 percent) is considered economical, while Appellant claims that its internal guidelines require a 25-percent rate of return. (Response at 3.)

The November 1, 1996, Decision of the Deputy State Director, affirming the Order of FDO, held that:

Lease Jic-117 is not diligently developed in the Pictured Cliffs formation. Undeveloped portions of the lease for this formation include the E1/2 section 27, the NW1/4 and SE1/4 section 28, and the N1/2 section 34, T. 26 N., R 3 W., NMPM. Lease Jic-117 is not diligently developed in the Gallup/Dakota [f]ormation. Undeveloped portions of the lease for this formation include the W1/2 section 27, and all of sections 28, 33, and 34, T. 26 N., R. 3 W., NMPM. The order to commence diligent development of the lease is hereby upheld. Any request for needed extensions of the deadline imposed by the order must be made to the AO in the Farmington District Office.

(Decision at 7.)

In its Statement of Reasons (SOR) for appeal to the Board, Appellant states "the only issue involved herein is whether the lease is being diligently developed." (SOR at 1.) Appellant urges on appeal that Burlington, acting as a prudent operator, has determined that the drilling of the well in the Pictured Cliffs formation would be uneconomic based on its standard economic evaluation. (SOR at 7.) Burlington claims that it furnished FDO with geologic and economic analyses and data supporting Appellant's conclusion that payout of the proposed Pictured Cliffs well would take more than 14 years at a rate of return of far less than Burlington's minimum economic criteria of 25 percent. Id. Appellant claims even this "is a far, far cry from the economic parameters acknowledged by the court in Jicarilla v. Supron [479 F. Supp. 536 (N.Mex. 1979), aff'd 728 F.2d 1555 (10th Cir 1984), dissent adopted en banc, 782 F.2d 855, modified, 793 F.2d 1171, cert denied, 479 U.S. 470 (1986)], of a three to one return within three to four years." (SOR at 8.) Appellant claims the issue in Jicarilla v. Supron, as in this case, is whether the drilling of additional wells to

recover the reserves is economically justifiable in the judgement of the prudent operator considering his own financial well-being in addition to that of his lessor. Id.

In its SOR, Appellant explains why it views the economic criteria and assumptions used by BLM in its economic evaluation to be unrealistic.

Economic evaluation of oil and gas development projects is relatively simple in theory. The capital investment required is measured against the expected net income from the project. Although the capital investment is a relatively straightforward estimate of up-front project costs, determination of the expected net income is a difficult and subjective process requiring assumptions regarding future oil and gas prices, production rates, recoverable reserves and expenses. Appropriate risk factors also must be used in calculating expected net income to account for reserve risk and mechanical risk since even development wells include varying degrees of risk that the reserves will not be present in the anticipated amounts or that mechanical problems may occur in drilling or producing the well.

In order for this to be an "apples to apples" comparison, both the capital investment and the net income are discounted to present value before comparison. This requires use of an appropriate discount factor, usually expressed as a percentage which approximates the average cost of capital for such projects.

The percentage amount, if any, by which the present value of the expected net income exceeds the present value of the capital investment is called the rate of return ("ROR"). All oil and gas companies have an established minimum ROR, often referred to as the "hurdle rate," below which a project is considered uneconomic.

The ROR used by BLM is unrealistic and far below the ROR used by prudent operators. \* \* \* Burlington uses a 25% ROR as its hurdle rate, which is in line with the hurdle rate used by other prudent oil and gas operators and is far less than the "3 to 1 return on investment" cited by the Court in Jicarilla v. Supron as reasonable. This does not mean that Burlington will make 25% return on every project, but only that it hopes to make a 25% return on a successful project if all of its assumptions on pricing, expenses, etc. were correct. Indeed, any person willing to encounter the risk of drilling oil and gas wells for a 10% rate of return on his capital would not be in business long. A few unsuccessful projects would quickly diminish the overall ROR in such case to much lower or even negative returns.

Moreover, BLM is apparently not including appropriate risk factors in its economic calculations. As previously discussed,

appropriate risk factors are used by prudent operators to account for reserve risks and mechanical risks.

Finally and most importantly, BLM misses the point. What BLM declares by fiat to be economical is not controlling; rather, it is what a prudent operator would deem to be economical that matters. This is only common sense. It is the lessee, not BLM or the lessor, who bears 100% of the risk and costs of a project. As previously noted by the court in Jicarilla v. Supron, the operator is entitled to be conservative in its evaluation and should be given deference in determining whether a project is economic.

(SOR at 8-10.)

In its Answer, BLM again urges that the reasonable profit (10 percent) as defined in Instruction Memorandum (IM) 89-12 Change 2 is both reasonable and realistic. (Answer at 7.) BLM explains that since BLM's minimum rate of return guidelines are based on an economic indicator (the 10-year Government Bond yield plus 3.38 percent to account for the time value of money, inflation and perceived risk), the reasonable rate of return fluctuates as the economy changes. Id. BLM states that in 1995, a 10-percent rate of return was much higher than the returns on fixed mortgage loans, savings accounts, bonds, and many other types of investments. Id. It further claims that a 25-percent rate of return could only be expected for "extremely high risk" ventures such as risky stocks in the stock market. Id. Finally, BLM argues that disputing whether a 10-percent rate of return is reasonable or not "is of no benefit when economic analyses indicate a rate of return exceeding 30% for both formations." 2/ Id.

In its Reply to BLM's Answer, Appellant reiterates that the only issue in dispute is whether Burlington's economic analysis was so erroneous as to violate the prudent operator standard articulated in Jicarilla v. Supron, supra. (Reply at 5.) Appellant claims BLM ignores the findings of the Court in Jicarilla regarding the rate of return a prudent operator might expect in drilling a development well and employs, instead, its own arbitrary and unrealistic criteria. Id. Appellant states that Burlington is not in the business of investing in bonds or T-bills—it is in the oil and gas business, with all of the attendant risks. Id. Appellant restates its claims that Burlington's criteria of a minimum rate of return of 25 percent is far less than the three-to-one return on investment in 3 to 4 years cited by the court in Jicarilla as reasonable. Id. Finally, Appellant states that there is no evidence that either of the proposed wells could return 30 percent as BLM's claims and that this figure comes from BLM's

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2/ We are unpersuaded by this BLM claim of a 30-percent return as it reflects only the best case scenario, rather than a weighted value in the Aries program used by both Appellant and BLM which considers best case, lowest case, average case and dry hole scenarios.

use of the best case scenario without properly weighing it with the worst case, average case and dry hole scenarios in the computer model. (Reply at 3.)

[1] Departmental regulations provide that, after notice in writing, the operating rights owner shall promptly drill and produce wells reasonably required in order that the lease may be properly and timely developed and produced in accordance with good economic practices. The applicable regulations governing a diligence well provide as follows:

The authorized officer is authorized and directed to \* \* \* provide technical information and advice relative to oil and gas development on Federal and Indian lands \* \* \* require compliance with lease terms, with the regulations in this title and all other applicable regulations promulgated under the cited laws; and to require that all operations be conducted in a manner which \* \* \* results in the maximum ultimate recovery of oil and gas with minimum waste. \* \* \* The authorized officer may issue written or oral orders to govern specific lease operations.

43 C.F.R. § 3161.2. The regulations also provide: "After notice in writing, the operating rights owner shall promptly drill and produce such other wells as the authorized officer may reasonably require in order that the lease may be properly and timely developed and produced in accordance with good economic operating practices." 43 C.F.R. § 3162.2(c).

In addition, Contract 117 provides that, if the lessee elects not to drill and produce wells other than those necessary to protect the leased land from drainage, "the Secretary of the Interior may, within 10 days after due notice in writing, \* \* \* require the drilling and production of such wells to the number necessary, in his opinion, to insure reasonable diligence in the development and operation of the property." (Contract 117, Paragraph 3(b)(3).) The lease also requires the lessee "[t]o exercise reasonable diligence in drilling and operating wells for oil and gas \* \* \* while such products can be secured in paying quantities." (Contract 117, Paragraph 3(f).)

A predicate to the Board's determination of this appeal is the determination of whether Burlington is the operating rights owner of E½ sec. 34, the area in which the Gallup/Dakota diligence well is to be drilled. This issue was raised by Appellant before BLM and in its SOR, addressed by BLM in its Answer, but not mentioned by Appellant in its Reply. See SOR at 12, Answer at 3. This is a significant issue because if there was an operator for the E½ sec. 34 other than Burlington, the record does not reflect that the required notice was provided. The regulation at 43 C.F.R. § 3162.2(c) expressly provides that "after notice in writing, the operating rights owner" shall promptly drill development wells as directed by the authorized officer. Similarly, the Designation of Operator form (quoted in BLM's Answer) expressly provides that "[i]n the case of default on the part

of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or order of the Secretary of the Interior or his representative." (Answer at 3.)

Burlington claimed Snyder Oil Corporation had the operating rights to E½ sec. 34 in correspondence with FDO in May 1995, after having received the BLM diligence demand letter. (May 24, 1995, Letter from Van Goebel, Burlington Resources, to Duane W. Spencer, FDO.) Subsequently, in its SOR, Appellant claimed that "Columbus and Hugoton, as owners of operating rights in that part of the Lease, should be given the opportunity to protect their rights." (SOR at 12.) In its Answer, BLM notes that there is no record of Hugoton involvement in Contract 117, a matter which would require approval by the Jicarilla Tribal Council. (Answer at 3.) In addition, BLM provides copies of letters as attachments to its Answer which reflect that Columbus Energy Corporation had its designation of operator for E½ sec. 34 rescinded at Burlington's request in 1987. (Attachment 6 to Answer (Van Goebel, Burlington, Letter to FDO dated June 6, 1987.)) A subsequent designation of Hixon Development Company as operator for NE¼ sec. 27, was accepted for record by BLM on June 9, 1987. (Attachment 7 to Answer.) Appellant has provided no evidence of a subsequent reassignment of the operating rights to E½ sec. 34 and no documentary evidence in the file reflects a subsequent assignment of the operating rights. We thus conclude that Burlington is both the lessee and operating rights owner of the land encompassed by E½ sec. 34.

[2] The prudent operator rule is applicable to Indian leases, including BLM orders to drill a well in order to diligently develop a lease. Cowden Oil and Gas Properties, 126 IBLA 32, 43 (1993); Nola Grace Ptasynski, 63 IBLA 240, 252, 89 I.D. 208, 215 (1982). The BLM Manual provides that "an economic well determination will be conducted to determine if a prudent operator can drill an offset well in the spacing unit being evaluated." BLM Manual 3160-16, Indian Diligent Development, Rel. 3-274 (Dec. 3, 1991), Appendix 3, Page 2, Paragraph 2, "Economic Well Determination (Prudent Operator Rule)." The BLM Manual defines the prudent operator rule as: "[I]n order for a well to be economic, it must be determined that it can produce a sufficient quantity of oil or gas to pay reasonable profit to the lessee over and above the cost of drilling and operating the well." BLM Manual 3160-16, Indian Diligent Development, Rel. 3-274 (Dec. 3, 1991), Glossary of Terms, Page 2. See Nola Grace Ptasynski, 63 IBLA at 247, 89 I.D. at 212.

"The prudent operator rule is, in essence, a limitation on the generally recognized implied duties of a holder of an oil and gas lease \* \* \*. The conceptual basis of the prudent operator rule lies in the fact that oil and gas leases are business arrangements entered into with an expectation of financial gain on both sides." Nola Grace Ptasynski, 63 IBLA at 248, 89 I.D. at 212. "If the recoverable oil underlying the land \* \* \* is insufficient to support the cost of recovery, no intelligent landowner would make out-of-pocket expenditures to drill a well. \* \* \* A lessee



should not be obligated to pursue a course of economic folly which a prudent owner would forego." Nola Grace Ptasynski, 63 IBLA at 251, 89 I.D. at 214-215. The prudent operator's obligation was described by then-Circuit Judge Willis Van Devanter in Brewster v. Lanyon Zinc Co., 140 F. 801 (8th Cir. 1905):

No obligation rests on [the lessee] to carry the operations beyond the point where they will be profitable to him, even if some benefit to the lessor will result from them. \* \* \* Whatever, in the circumstances, would be reasonably expected of operators of ordinary prudence, having regard to the interests of both lessor and lessee, is what is required.

Id. at 814. Thus, if Burlington cannot make a reasonable profit over and above the cost of drilling and operating the proposed diligence wells, it should not be required to drill the wells.

Appellant contends that it provided the FDO with significant data on March 22 and April 2, 1996. It states:

Burlington, acting as a prudent operator, has determined that the drilling of the PC well in dispute would be uneconomic based on its standard economic evaluation. Burlington furnished the FDO with geologic and economic analyses and data supporting Burlington's conclusion that payout of the proposed PC well in the area the FDO identified as the most prospective would take more than 14 years at a rate of return of far less than Burlington's minimum economic criteria of 25%. This is a far, far cry from the economic parameters acknowledged by the court in Jicarilla v. Supron of a three to one return within three to four years.

(SOR at 7-8.)

Similarly, Appellant claims the geologic data and economic analyses for the Gallup/Dakota formation would not support drilling a well at this time. It cites the affidavit of Todd Mushovic, Reservoir Engineer II, of Burlington Resources Oil and Gas Company. Mushovic states:

Based upon Burlington's reservoir, geological and other data and information regarding the Lease which I have reviewed, it is my opinion, and that of Burlington as well, that the economics of developing the best Gallup/Dakota potential on the Lease are less favorable than the economics of development of the best Pictured Cliffs potential on the Lease. Consequently, since the attached summary sheets indicate that development of the Pictured Cliffs

potential on the Lease is not economic using Burlington's standard economic criteria, development of the Gallup/Dakota formation on the Lease would also be uneconomic.

(Appellant's Reply, Exhibit A at A-2.) Burlington Resources offers an overall project summary which adds the probability-weighted revenue and expense numbers for best possible case, lowest possible case, average possible case and dry hole possibility to arrive at the overall project economics. Consequently, from the economic summary, the Pictured Cliffs well in question would yield a 9.69-percent rate of return at \$1.18/MCF gas prices and \$15.72 percent rate of return at \$1.50/MCF gas prices, both of which, Appellant claims, fall far below Burlington's minimum criteria of 25 percent and even further below the criteria employed by the Court in Jicarilla v. Supron, *supra*. Appellant further urges that a well drilled in the Gallup/Dakota formation would not be as productive as the figures cited for the Pictured Cliffs formation. (Reply at 3.)

[3] We are not persuaded by Appellant's argument. An administrative decision ordering the drilling of two diligence wells is properly affirmed if the case record indicates, after a review of the geology, engineering analysis, and the economic risks, that the lessee-operator would likely exceed the rate of return established in BLM Directive IM 89-12 Change 2. BLM's minimum rate of return guidelines are based on an economic indicator (the 10-year Government Bond yield plus 3.38 percent to account for the time value of money, inflation and perceived risk), and as a result, the rate of return fluctuates as the economy changes. That rate is presently approximately 10 percent. Appellant argues that the rate established in IM 89-12 Change 2 should not apply here because that rate does not satisfy the internal rate of return requirements Burlington has set for any commitment to drill as a prudent operator.

We find that it is not Burlington's internal constraints, but IM 89-12 Change 2, that governs. Section 32 of the Mineral Leasing Act, 30 U.S.C. § 189 (1994), authorizes the Secretary "to prescribe necessary and proper rules and regulations" and to take other actions he deems necessary to carry out the purposes of the Act. See Coastal States Energy Co., 110 IBLA 179, 182 (1989); Veola and Aaron Rasmussen, 109 IBLA 106 (1989). As noted above, the applicable regulations governing the diligence obligation, 43 C.F.R. §§ 3161.2 and 3162.2(c), provide that the authorized officer is authorized and directed to require compliance with lease terms, to require that all operations be conducted in a manner which results in the maximum ultimate recovery of oil and gas with minimum waste, and is authorized to issue written or oral orders to an operator to promptly drill and produce such other wells as the authorized officer may reasonably require in order that the lease may be properly and timely developed and produced in accordance with good economic operating practices. Duly promulgated regulations have the force and effect of law and are binding on the Department. Veola and Aaron Rasmussen, *supra*; Western Slope Carbon, Inc., 98 IBLA 198 (1987). See also GeoResources, Inc., 107 IBLA 311, 96 I.D. 77 (1989).

In addition, as we noted above, Contract 117 clearly placed Appellant on notice concerning its diligence requirements. The Contract provides that if the lessee elects not to drill and produce wells other than those necessary to protect the leased land from drainage, "the Secretary of the Interior may, within 10 days after due notice in writing, \* \* \* require the drilling and production of such wells to the number necessary, in his opinion, to insure reasonable diligence in the development and operation of the property." (Contract 117, Paragraph 3(b)(3).) The lease also requires the lessee "[t]o exercise reasonable diligence in drilling and operating wells for oil and gas \* \* \* while such products can be secured in paying quantities." (Contract 117, Paragraph 3(f).)

In the present case, the expected rate of return from both prospective wells, after considering the weighted averages computed for risk using the Aries program, and computing a drilling cost of \$343,000 per well, would be in the range of 10 percent-15 percent, depending on whether the price of gas is closer to \$1.13 MCF or \$1.50 MCF at the time of production. This is within the parameters established by Departmental Directive IM 89-12 Change 2.

Finally, we address Appellant's reliance on the ruling in Jicarilla v. Supron, *supra*, and find the case to be inapposite. In that case, unlike the present scenario, the reservoir underlying the lease within the Gallup formation was already being drained by existing wells, and thus a slightly increased production rate on the lease at the cost of a new well would not have been a prudent act under the circumstances. See Jicarilla v. Supron, *supra*, at 545.

In this case, Appellant has a significant option it can exercise. If Burlington determines that, despite the fact that IM 89-12 Change 2 requirements are met, its internal drilling parameters are not satisfied, it may choose to relinquish that part of the lease that it believes may not meet those parameters and that it does not plan to diligently develop under the criteria established by IM 89-12 Change 2. Appellant indicates, however, that it does not choose to relinquish any part of Contract 117.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 C.F.R. § 4.1, the November 1, 1996, Decision of the New Mexico Deputy State Director is affirmed.

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James P. Terry  
Administrative Judge

I concur:

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James M. Burski  
Administrative Judge